

Name: _____

Math 165 Quiz/HW #2

① Find a positive and a negative coterminal angle for each angle given below:

a) 45°

b) $\frac{\pi}{2}$

c) $\frac{3\pi}{7}$

② Evaluate each expression (Exact Values)

a) $\sin \left(\frac{\pi}{3} \right) =$

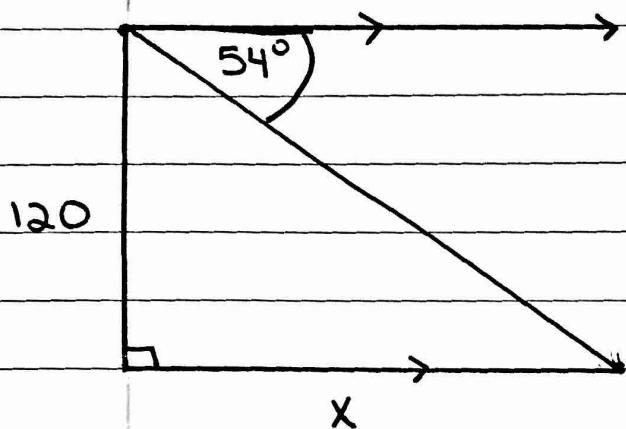
b) $\cos \left(\frac{3\pi}{4} \right) =$

c) $\tan (3\pi) =$

d) $\cos \left(\frac{2\pi}{3} \right) =$

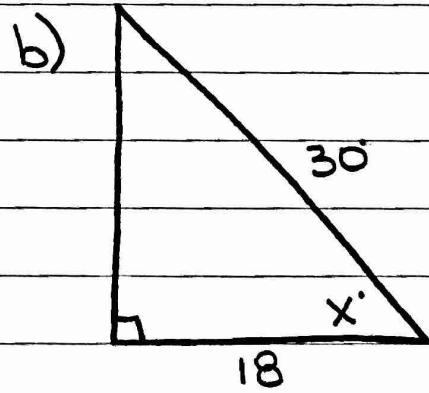
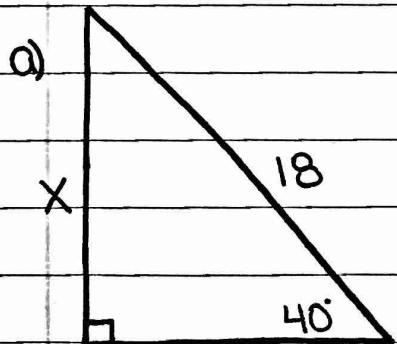
e) $\sin \left(\frac{7\pi}{4} \right) =$

③ Find the value of x in the diagram below:



④ What is the value of $\cos \theta$ if $\sin \theta = \frac{4}{5}$?

⑤ Solve each triangle below:



⑥ What is the 13th term in an arithmetic sequence where $a_2 = 6$ and $a_5 = 18$?

⑦ What is the sum of the first 13 terms in an arithmetic sequence where $a_4 = 9$ and $a_7 = 24$?

⑧ How tall is a tree if the angle of elevation from you ~~is~~ to the top of the tree is 16° and you are 94 feet away from the tree?